

HRSD COMMISSION – FINANCE COMMITTEE
Meeting Minutes
April 14, 2022

PRESENT: Commissioners Elofson, Lakdawala, Levenston, Rodriguez, Stern, Taraski, and Templeman

1. **Internal Audit Update**

Mr. Matthew Simons, Ms. Lindsay Puccio and Mr. Samuel Fitzgerald of the SC&H Group, presented the internal audit update including audit impact, audits in progress, audit summaries, revised FY-2022 audit plan, FY-2023 audit plan, management action plan progress, and upcoming audits as listed below.

Completed Audits:

- Emergency Repairs
- Model 3 Billing
- Risk Assessment FY-2022

Audit in Progress:

- Unifier/ERP Integration

Upcoming Audits:

- Freedom of Information Act
- Family Medical Leave Act
- Grants Management
- Personally Identifiable Information
- Vendor/Contract Compliance
- Remote Access/Network Security
- Risk Assessment Refresh

2. **Proposed Fiscal Year-2023 Annual Budget Review**

Staff presented details on the FY-2023 budget; FY-2023 to FY-2032 Capital Improvement Program (CIP), and rates.

The Finance Committee will present its report to the full Commission at the April 26, 2022 meeting. The entire budget package will be presented for Commission approval at the May 24, 2022 meeting.

Attachment: [Presentations](#)

Public Comment: None

Next Committee Meeting Date: TBD

Meeting Adjourned: 10:59 a.m.

SUBMITTED:


Jennifer L. Cascio
Secretary

APPROVED:


Stephen Rodriguez
Committee Chair



Hampton Roads Sanitation District

Internal Audit Update

Internal Audit Team Present

Matthew Simons: CPA, CIA, CGAP

Engagement Principal

Lindsay Puccio

Manager

Samuel Fitzgerald: ITIL, CISA, CISM

IT Audit Manager

Agenda

Internal Audit Update

- | | | | |
|-----------|----------------------------------|-----------|---------------------------------|
| 01 | Internal Audit Impact | 05 | FY23 Internal Audit Plan |
| 02 | Internal Audit Progress Update | 06 | Management Action Plan Progress |
| 03 | Internal Audit Summaries | 07 | Supplemental Information |
| 04 | Revised FY22 Internal Audit Plan | | |

Internal Audit Impact

Statistics

- 7 risk assessment exercises
- 25 of 29 internal audits/projects completed or in-process (86%)
- 13 of 22 high risk functions to be assessed (59%)
- 34 of 68 total functions to be assessed (50%)
- 98 closed management action items (76%): 12 internal audits/projects fully closed

Internal Audit Progress Update

Audit/Task	Department	Status
Emergency Repairs	Engineering / Operations	Completed
Model 3 Billing	Finance	Completed
Unifier / ERP Integration	Finance / Engineering	Reporting
Freedom of Information Act	Enterprise-Wide	Planning
Family Medical Leave Act	Enterprise-Wide	Planning
Risk Assessment: FY22	Enterprise-Wide	Completed
Management Action Plan Evaluation & Admin	Enterprise-Wide	Ongoing

Emergency Repairs

Objectives

- Evaluate select emergency repair management activities for operational effectiveness.
- Evaluate emergency repair vendor performance for compliance with agreements and contracts.
- Evaluate emergency repair incidents for compliance with Department of Environmental Quality regulatory reporting.
- Perform analytical procedures on emergency repair data and evaluate for opportunities for HRSD to streamline processes and reduce costs.

Emergency Repairs

Results

- Observation 1: Pertinent documentation may not be completed timely for each emergency event/repair.
- Observation 2: There is a lack of documentation associated with the opening, closing, reopening, and reclosing of emergency repairs that explains why a project status has changed.

Model 3 Billing

Objectives

- Assess infrastructure and operations security controls.
- Assess appropriateness of access and identify management policies and procedures within Oracle Customer Care and Billing.
- Assess vulnerability management procedures and determine if procedures in place are effective.
- Assess whether business continuity planning and disaster recovery policies and procedures are in place and effective.
- Assess training procedures and determine if procedures in place are effective.

Unifier / ERP Integration

Objectives

- Evaluate data traveling through the following workflow for completeness and accuracy:
 - Unifier workflow
 - Unifier to ERP
 - ERP to Unifier
- Evaluate the timeliness of data processes within the Unifier system
- Evaluate current access to the Unifier system to ensure access appears appropriate
- Evaluate the Unifier system's policies and procedures to ensure they are consistently applied

FY22 Revised Internal Audit Plan

Audit/Task	Department	Status
Freedom of Information Act	Enterprise-Wide	Planning
Family Medical Leave Act	Talent Management	Planning
Grants Management	Finance	Planned: June Q2 CY22 (Q4 FY22)
Management Action Plan Evaluation & Admin	Enterprise-Wide	Ongoing

FY23 Internal Audit Plan

Audit/Task	Department	Total Fees (Estimate)	Status
Personally Identifiable Information	Talent Management	\$54,000	Planned: September Q3 CY22 (Q1 FY23)
Vendor/Contract Compliance	Finance	\$54,000	Planned: November Q4 CY22 (Q2 FY23)
Vendor/Contract Compliance	Engineering	\$54,000	Planned: March Q1 CY23 (Q3 FY23)
Remote Access/Network Security	Information Technology	\$46,000	Planned: June Q2 CY23 (Q4 FY23)
Risk Assessment Refresh	Enterprise-Wide	\$21,000	Planned: November Q4 CY22 (Q2 FY23)
Management Action Plan Evaluation & Admin	Enterprise-Wide	\$21,000	Ongoing
	Total	\$250,000	

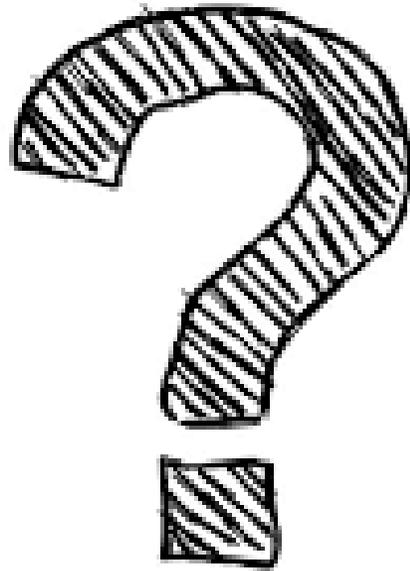
Management Action Plan Progress

Subject (Non-confidential)	Report Date	Recommendations		
		Closed	Open	Total ¹
Biosolids Recycling	10/8/2016	7	1	8
Treatment Plant Operations	10/15/2018	8	1	9
Safety Division	9/12/2019	0	2	2
SWIFT Program	2/24/2021	9	3	12
Fleet Services	2/24/2021	0	17	17
Succession Planning	6/4/2021	0	4	4
Emergency Repairs ²	1/18/2022	0	3	3
Prior Audits: Fully Closed (x12)	Various	74	0	74
	Totals	98	31	129

¹ Action plan counts do not include confidential internal audits.

² Action plans are not due until 2023.

Discussion and Questions



SC&H Contacts

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Manager

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Samuel Fitzgerald

IT Audit Manager

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Supplemental Information

2022 vs. 2021 Metrics

	2022	
Risk Level	Function Count	Function %
Low	6	9%
Moderate	33	48%
High	29	43%
Totals	68	100%

	2021	
Risk Level	Function Count	Function %
Low	3	5%
Moderate	33	51%
High	28	44%
Totals	64	100%

Audit Universe: High Risk

AUDIT DETAILS		RISK RANKINGS			HISTORY	
Department	Audit Area	Likelihood Rating	Impact Rating	Overall Risk Rating	Audit Order	Audit Year
Engineering	SWIFT Program	H	H	H	A1.16	FY20
Information Technology	IT: Network Security/Cybersecurity	H	H	H	A1.7	FY18
Information Technology	IT: Data Management and Operations	H	H	H	A2.11	FY23
Information Technology	IT: Data Center Physical Security and Environmental Controls	H	H	H	TBD	TBD
Engineering	Design & Construction: Procurement Process	H	H	H	A1.6	FY17
Finance & Accounting	Accounting: Grants Management	H	H	H	A2.10	FY23
Finance & Accounting	Procurement: Contract Management	H	H	H	A2.5	FY22
Information Technology	IT: Applications (e.g. ERP, GIS, SCADA, CMMS, CC&B, EDMS, and other)	H	H	H	A2.9	FY23
Information Technology	IT: Disaster Recovery	H	H	H	TBD	TBD
Enterprise-Wide	Business Continuity & Disaster Recovery (Operations)	H	H	H	A1.10	FY19
Water Quality	WIP 3 (Watershed Implementation Plan)	H	H	H	A1.10	FY19
Finance & Accounting	Customer Care: A/R & Delinquent Accounts	H	H	H	TBD	TBD
Information Technology	IT: Governance	H	H	H	A2.6	FY22
Information Technology	IT: Vendor and Contractor Management	H	H	H	TBD	TBD
Talent Management	Personally Identifiable Information (PII)	H	H	H	TBD	TBD
Engineering	Unifier Project Management & ERP Integration	H	H	H	A2.8	FY23
Talent Management	HR: Compensation and Benefits	H	H	H	A2.4	FY22
Enterprise-Wide	Remote Work/Productivity	H	H	H	A1.3	FY17
Communications	Communications	H	H	H	A2.6	FY22
Enterprise-Wide	Physical Security	M	H	H	TBD	TBD
Enterprise-Wide	Compliance Management	M	H	H	A2.7	FY22
Enterprise-Wide	Third-Party Risk Management	H	M	H	TBD	TBD

Audit Universe: Moderate/Low Risk

AUDIT DETAILS		RISK RANKINGS			HISTORY	
Department	Audit Area	Likelihood Rating	Impact Rating	Overall Risk Rating	Audit Order	Audit Year
Engineering	Design & Construction: CIP Project Management	H	H	M	A1.1	FY16
Operations	Treatment Plants	H	H	M	A1.9	FY18
Water Quality	Regulatory/Reporting (e.g. Water, Air, Solids, Nutrients)	H	H	M	A1.13	FY19
Engineering	Design & Construction: Emergency Repairs	M	H	M	A2.2	FY21
Customer Care: Billing Models	Customer Care: Billing Models	M	H	M	A2.3	FY21
Water Quality	Quality Assurance (Accreditation)	M	H	M	A1.13	FY19
Water Quality	Permitting Operations	H	M	M	A1.13	FY19
Finance & Accounting	Customer Care: Billing	M	H	M	A1.11	FY19
Information Technology	IT: Mobile	M	H	M	TBD	TBD
Engineering	Asset Management (Y3 Implementation)	M	M	M	TBD	TBD
Finance & Accounting	Procurement: P-Card Administration	M	M	M	A1.5	FY17
Talent Management	Organizational Development & Training	M	M	M	TBD	TBD
Water Quality	BioSolids	M	M	M	A1.2	FY16
Enterprise-Wide	Employee Morale/Culture	M	M	M	TBD	TBD
Engineering	Planning & Analysis	M	M	M	TBD	TBD
Finance & Accounting	Accounting: Accounts Payable	M	H	M	TBD	TBD
Finance & Accounting	Accounting: Revenue/Accounts Receivable	M	H	M	TBD	TBD
Finance & Accounting	Accounting: Debt Management	M	M	M	A2.1	FY21 FY22
Finance & Accounting	Procurement: Process	M	M	M	A1.5	FY17
Operations	Electrical & Instrumentation Management	M	M	M	TBD	TBD
Talent Management	HR: Strategy	M	H	M	A1.18	FY20
Water Quality	Pollution Source Control	M	M	M	A1.15	FY20
Enterprise-Wide	Rate Increases	M	H	M	TBD	TBD

Audit Universe: Moderate/Low Risk

AUDIT DETAILS		RISK RANKINGS			HISTORY	
Department	Audit Area	Likelihood Rating	Impact Rating	Overall Risk Rating	Audit Order	Audit Year
Finance & Accounting	Accounting: General Accounting, Financial Reporting, and Process	M	M	M	TBD	TBD
Finance & Accounting	Accounting: Cash Management and Investments	M	M	M	TBD	TBD
Talent Management	HR: Recruiting/Onboarding/Offboarding	M	M	M	TBD	TBD
Enterprise-Wide	Insurance/Risk Management	M	M	M	TBD	TBD
Enterprise-Wide	Corporate Policies and Procedures	M	H	M	TBD	TBD
Enterprise-Wide	Lawsuits/ Legal Concerns	M	H	M	TBD	TBD
Finance & Accounting	Accounting: Fixed Assets	M	H	M	TBD	TBD
Finance & Accounting	Customer Care: Call Center	M	M	M	A1.11	FY19
Operations	Water Technology & Research	M	M	M	TBD	TBD
Engineering	Construction Claims	M	L	M	TBD	TBD
Finance & Accounting	Procurement: Surplus Program	M	M	M	TBD	TBD
Operations	Support Systems: Facilities Management	M	M	M	TBD	TBD
Finance & Accounting	Accounting: Budgeting	L	H	M	TBD	TBD
Enterprise-Wide	Corporate Governance	M	H	L	A1.8	FY18
Finance & Accounting	Accounting: Payroll	M	H	L	A1.14	FY20
Operations	Inventory	M	M	L	A1.4	FY17
Talent Management	Safety	M	H	L	A1.12	FY19
Finance & Accounting	Customer Care: Mail Center & Payments	L	M	L	A1.11	FY19
Operations	Support Systems: Fleet	L	M	L	A1.17	FY20
Water Quality	Operations	L	L	L	TBD	TBD
Enterprise-Wide	Media & Public Relations	L	L	L	TBD	TBD
Operations	Support Systems: Machine Shop and Carpentry Shop	L	L	L	TBD	TBD
Enterprise-Wide	Legal Operations (Managing Attorneys)	L	L	L	TBD	TBD



FY2023 Finance Committee
April 14, 2022

- SC&H Update
- FY23 Budget
- FY23-32 CIP
- Rates
 - Small Communities
 - Surcharge
 - Hauled Waste and Fats, Oils and Grease (FOG) Rate
 - Facility Charges

FY23 Budget At-A-Glance

- Revenue \$388M 9.1% Rate Increase
- Operating Expenses - \$189M 5.7% YOY Increase
- Debt Service - \$70M

- PAYGO (Cash for CIP) = \$129M
- FY23 Capex = \$411M \$110M FY22 Carry-over

- Financed Amount = \$282M WIFIA
Clean Water Loans
Line of Credit

- 10-year CIP = \$3.1B
- 20-year CIP = \$5.4B

Where does HRSD spend money? 51% is for Infrastructure



Infrastructure Projects,
\$0.51



People, \$0.23

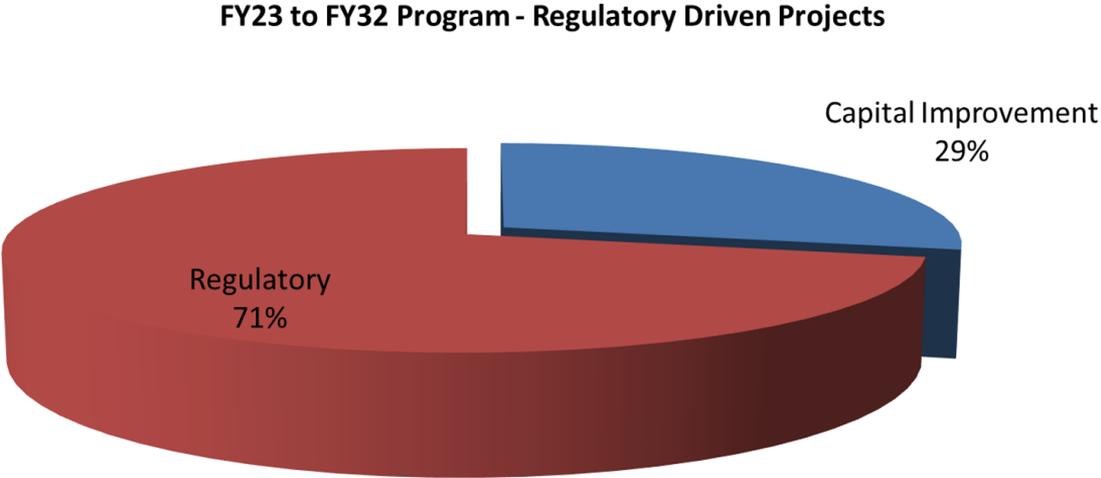


Operational Expenses,
\$0.26

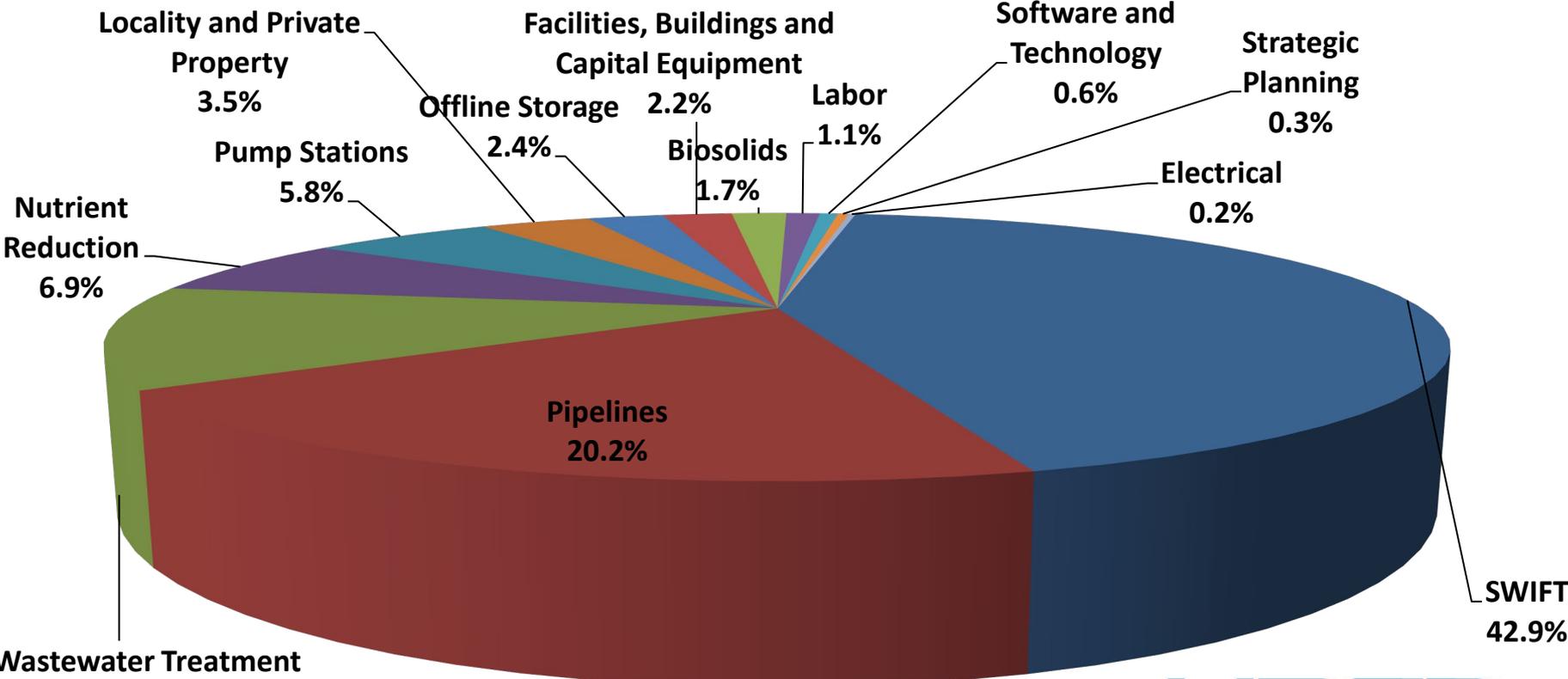
Debt Service +
Cash for CIP

FY2023-2032 CIP Stats – 71% Regulatory

- FY23-32 = \$3.1B
- 227 Projects
- Integrated Plan to FY32
 - \$1.9B SWIFT projects
 - \$185M High Priority 1
 - \$18M High Priority 2



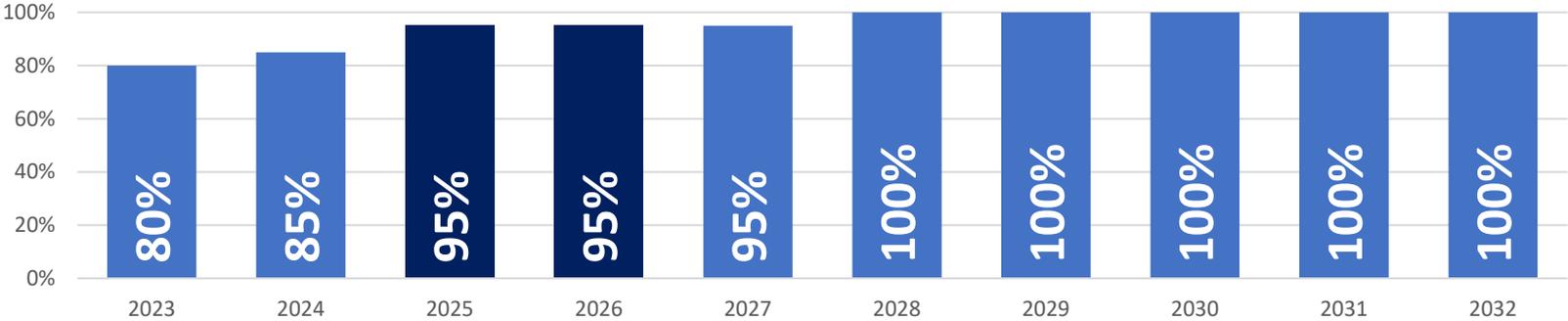
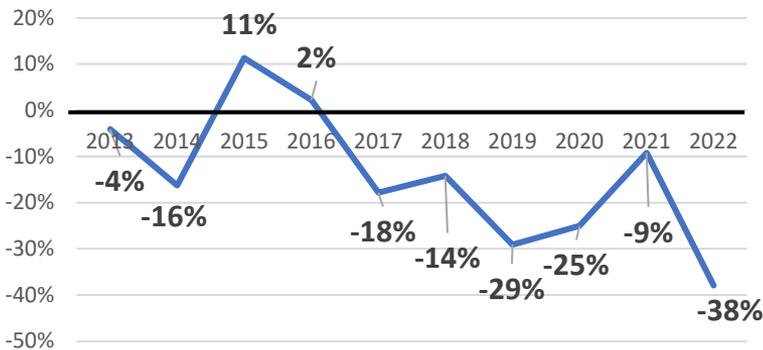
Project Types



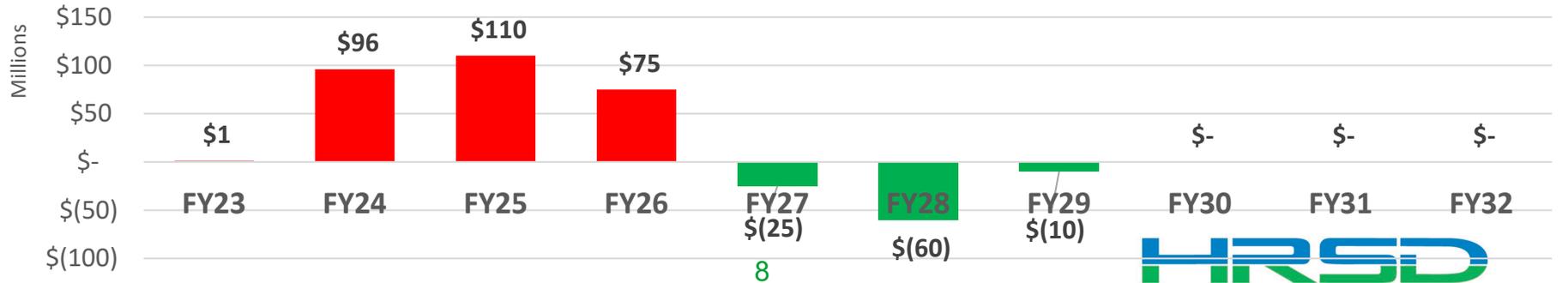
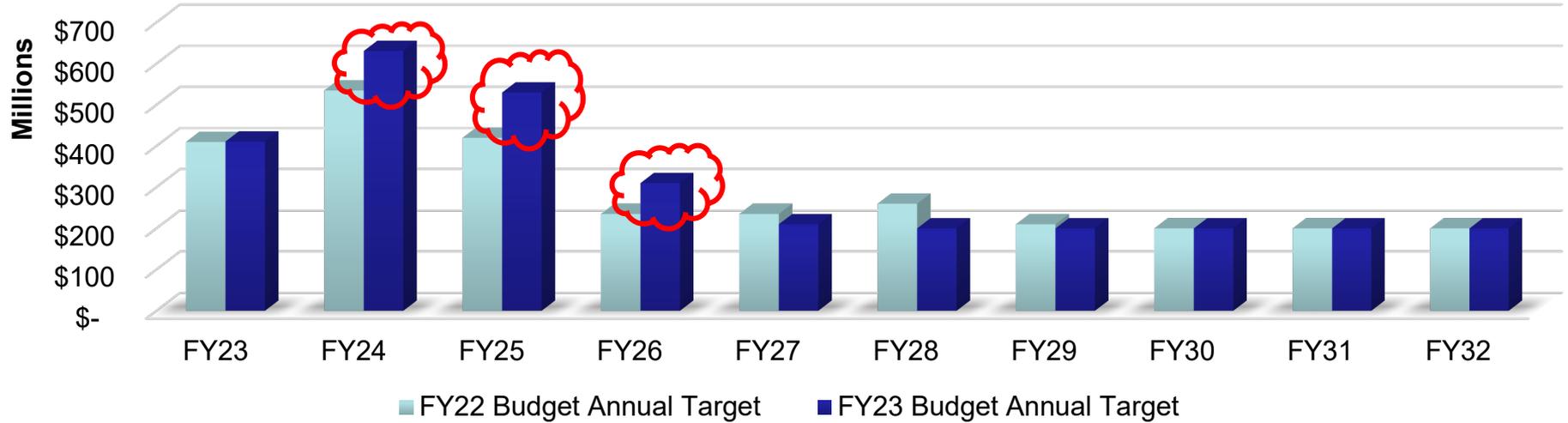
CIP Spend Rate

- Uses historical data to estimate projected spend
- Last five years **19% below target**
- Higher in compliance years

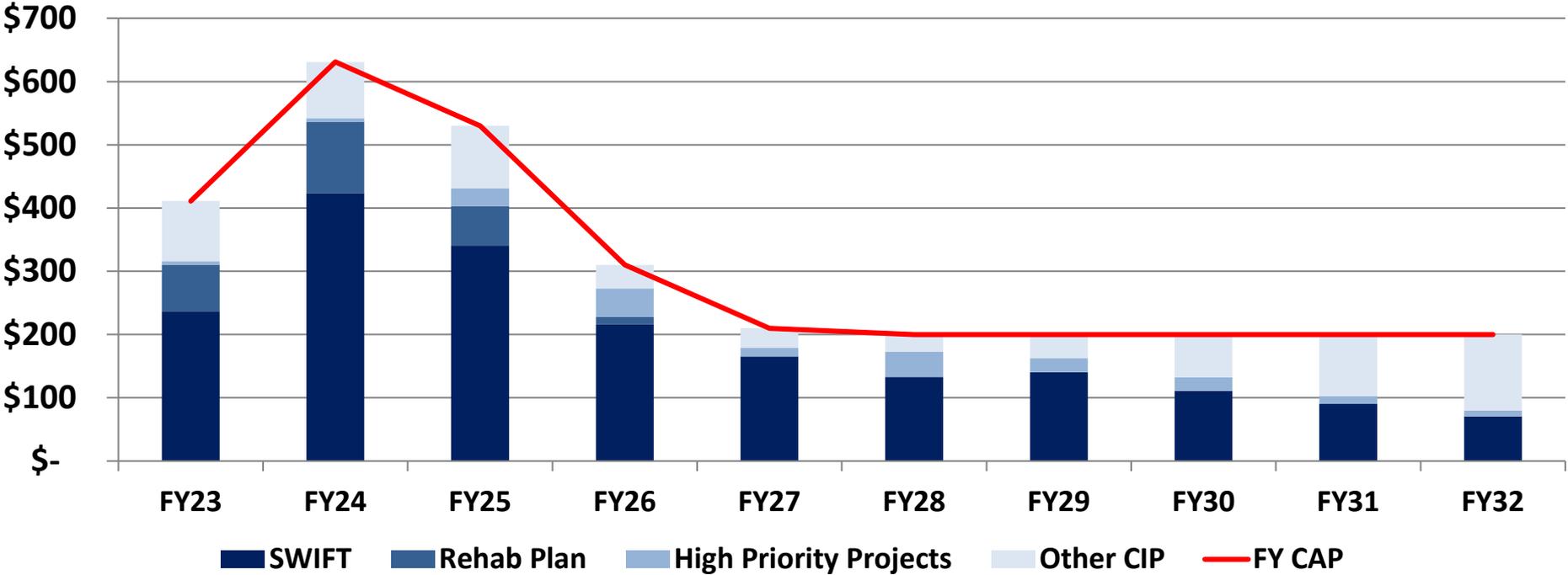
Actual v. Projected - Percent Difference



FY2023-2032 Adjustments to Annual CIP Spending Targets



Annual CIP Spend by Major Program



REVENUES

- Projected rate increases up 0.5% from year 2028 and beyond

EXPENSES

- Slightly higher inflation rates assumed in the near term

FINANCING

- Assumes first WIFIA draws in FY23
- Line of Credit – up to \$300M
- Virginia Clean Water Revolving Loan - \$100M
- WQIF grants and potentially ARPA principal forgiveness

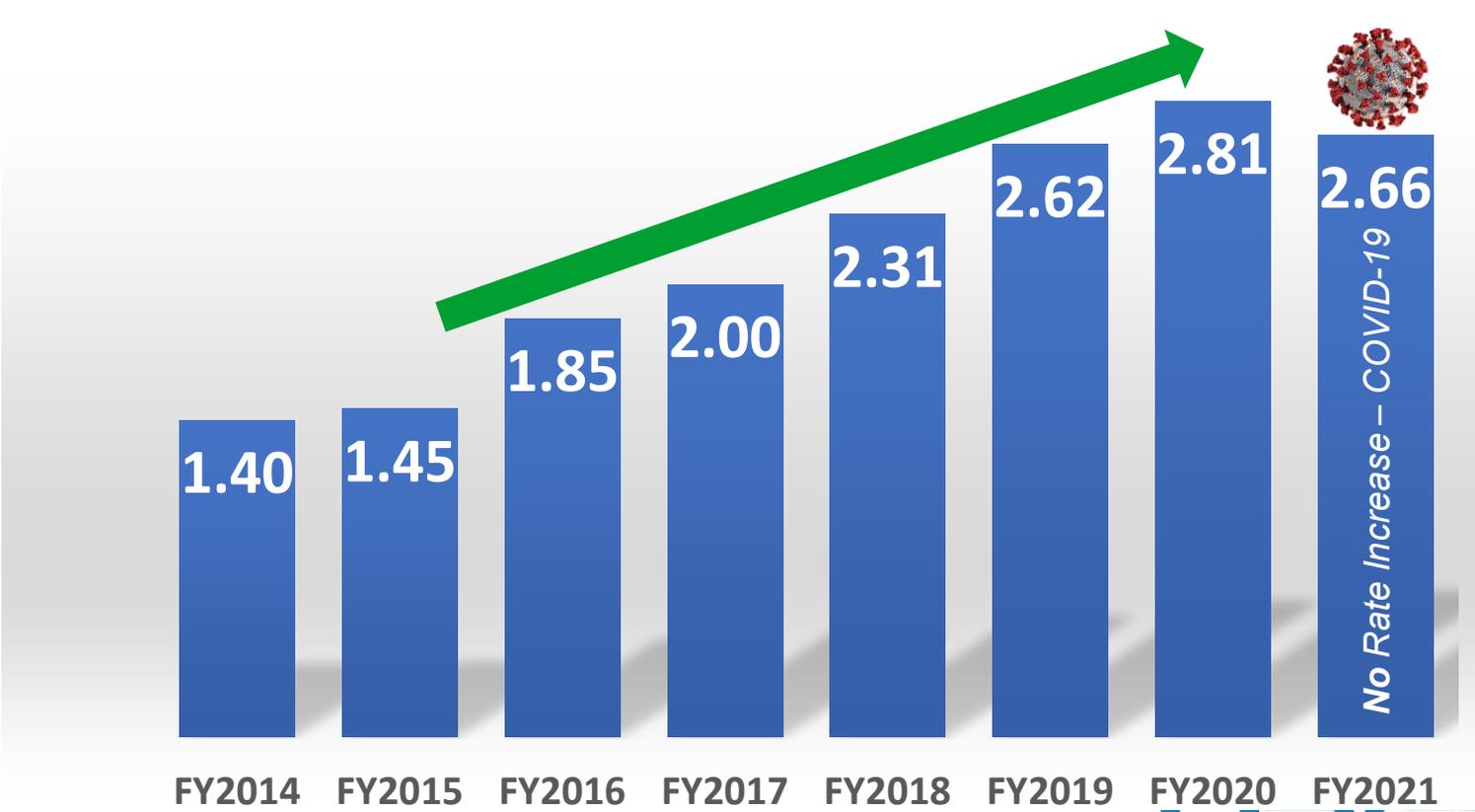
$$\text{Debt Service Coverage Ratio} = \frac{\text{REVENUES} - \text{EXPENSES}}{\text{Principal} + \text{Interest}}$$

- *How much income will you generate to pay Debt Service (principal + interest)?*
- *Will bond investors get paid back?*
- *Higher is better*

Target = 2.0x
Policy = 1.4x

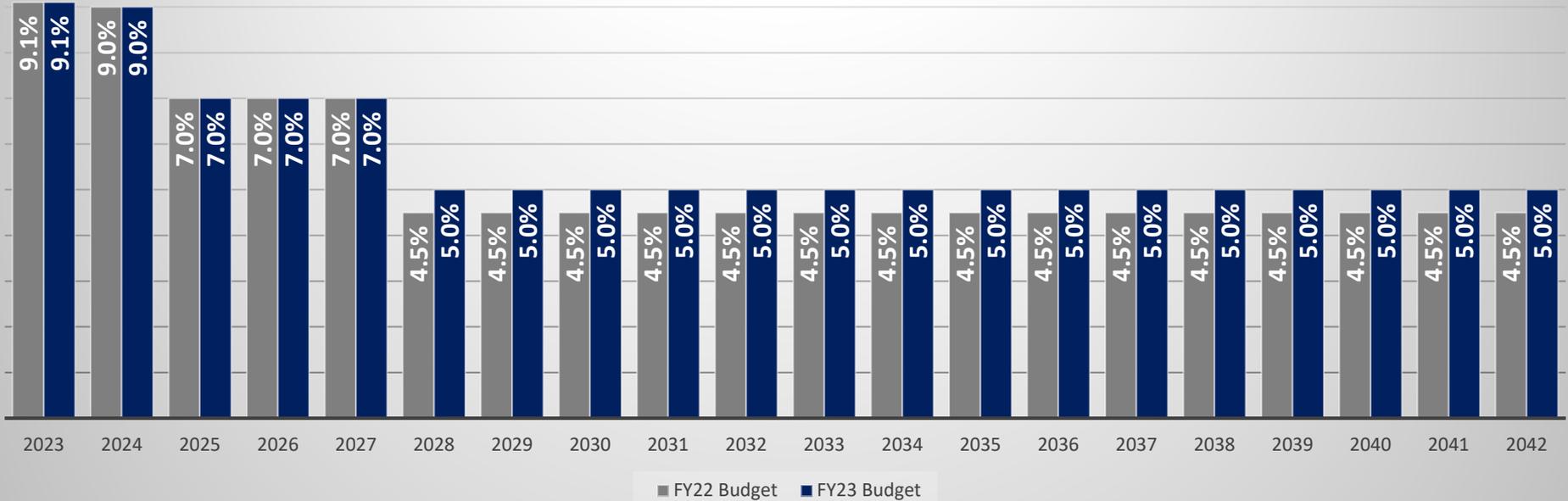
2.0 means that you have **two times more money available** to pay for your loan payment

Financial Forecast Strategy Execution



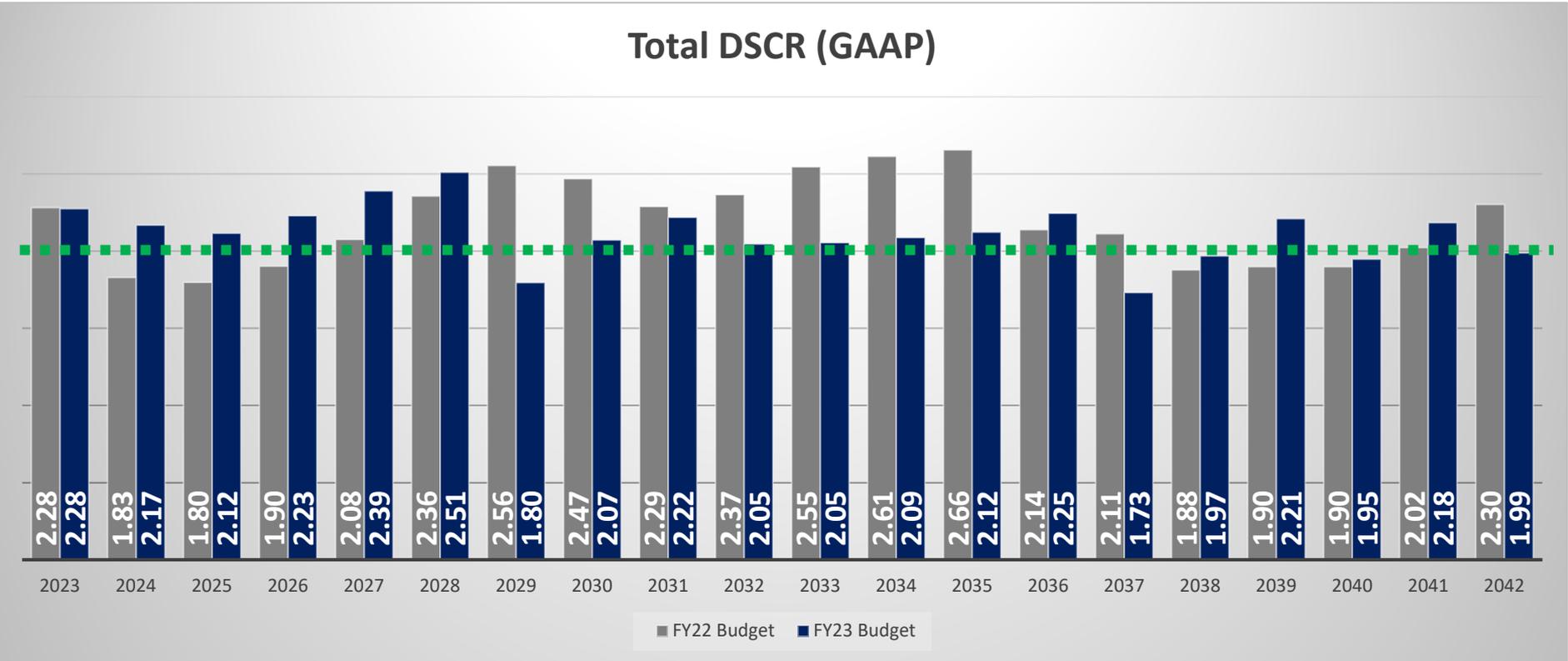
Projected Wastewater Rates

Wastewater Rate Projection



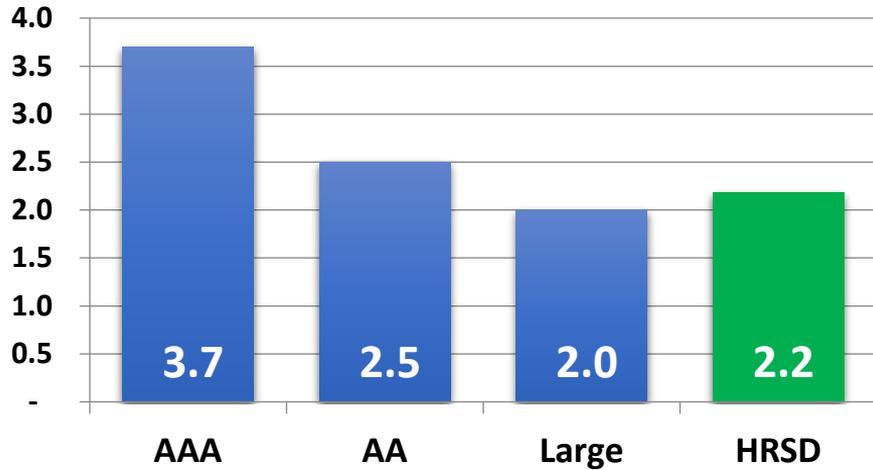
20-Year Financial Forecast – Debt Service Coverage Target = 2.0x

Total DSCR (GAAP)

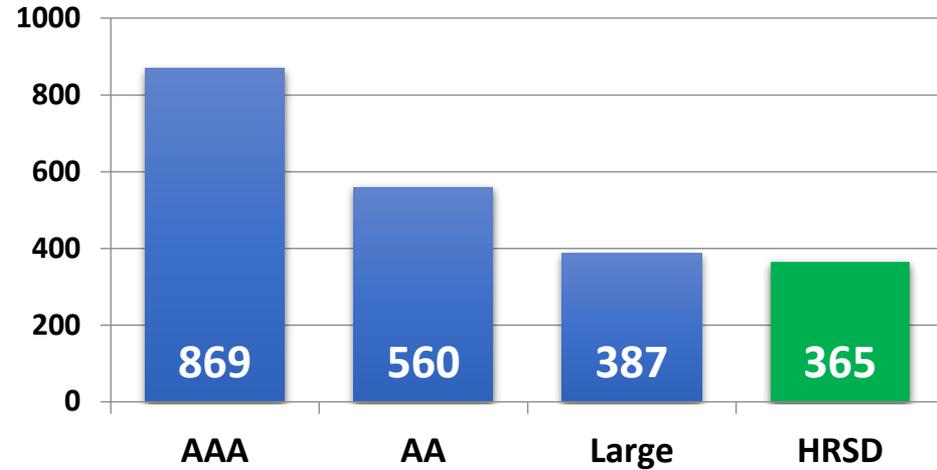


Forecast Metrics compared to Moody's Rating Agency Medians

Total Debt Service Coverage Median Comparison



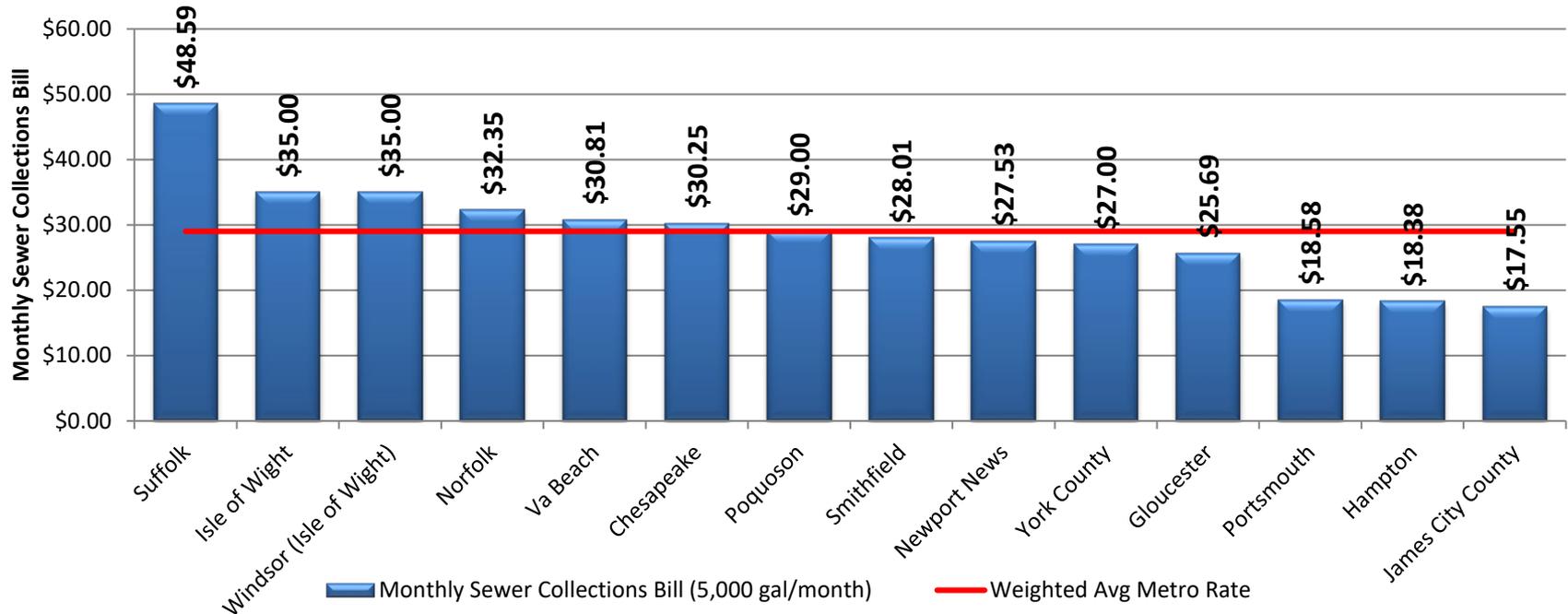
Days Cash on Hand Median Comparison



**HRSD = 10-year forecast average*

Small Communities Rate Based on Weighted Avg Metro Rate

FY23 Collections Rate - \$5.81/k-gals, up 1.2%



Proposed Small Communities Rate (per k-gals), 6% monthly bill increase

	HRSD Rate (\$/k-gals)	Collections Rate (\$/k-gals)	Capital Recovery Rate (\$/k-gals)	FY23	Min Daily Charge for metered	Min 30-day Charge for metered	Flat Monthly Bill ¹	Flat Daily Charge
Eastern Shore	\$9.32	\$5.81	N/A	\$15.13	\$0.30	\$9.00	\$60.52	\$2.02
King William	\$9.32	\$5.81	\$0.24	\$15.37	\$0.30	\$9.00	\$61.48	\$2.05
Mathews	\$9.32	\$5.81	N/A	\$15.13	\$0.30	\$9.00	\$60.52	\$2.02
Surry	\$9.32	\$5.81	N/A	\$15.13	\$0.30	\$9.00	\$60.52	\$2.02
Middlesex/Urbanna	\$9.32	\$5.81	N/A	\$15.13	\$0.30	\$9.00	\$60.52	\$2.02
West Point	\$9.32	\$5.81	N/A	\$15.13	\$0.30	\$9.00	\$60.52	\$2.02

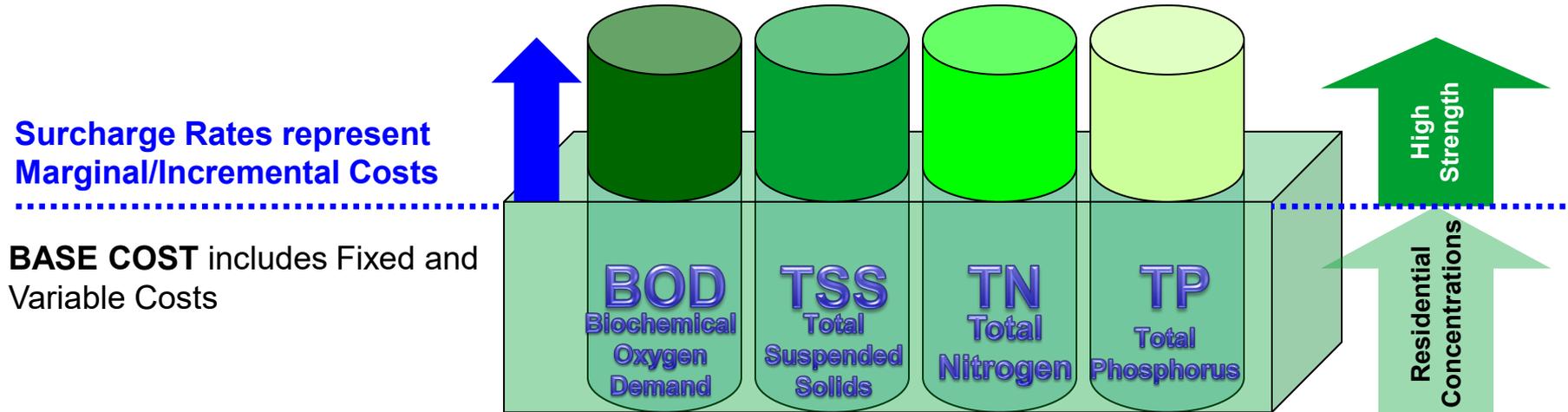
¹ Assumes 4,000 gals per month

\$3.40 Increase

FY23 Treatment Rate - \$6.97/ccf = \$9.32/k-gals)

Surcharges for High Strength or Unusual Wastes

- Domestic Quality Wastewater
- High Strength or Unusual Wastes



FY23 Proposed Surcharge Rates – Incorporates Moving Averages

FY23 Surcharge Rate per 100 lbs			FY23 vs FY22		
Pollutant	FY22	FY23	\$ Differential	% Difference	
Biochemical Oxygen Demand (BOD)	\$ 2.83	\$ 2.97	\$ 0.14	4.9%	
Total Suspended Solids (TSS)	\$ 9.34	\$ 9.79	\$ 0.45	4.8%	
Total Phosphorus (TP)	\$ 160.99	\$ 152.67	\$ (8.32)	-5.2%	
Total Kjeldahl Nitrogen (TKN)	\$ 42.61	\$ 43.33	\$ 0.72	1.7%	

Ches-Eliz closure

Hauled Waste and Fats, Oils, and Grease (FOG) Rates

- Cost to treat excluding conveyance – Volume, BOD, TSS, TKN, TP
- FOG costs significantly more to treat
- Chemicals/Polymers driving increases
- Proposed Rates



FY23		FY23 vs FY22		
Hauled Waste Type	FY22	FY23	\$ Differential	% Difference
Mixed, Portable Toilet, Residential Septage	\$ 0.1717	\$ 0.1812	\$ 0.0095	5.5%
Fats, Oils, Grease (FOG)	\$ 0.2737	\$ 0.3339	\$ 0.0602	22.0%

Proposed FY23 Facility Charges

- Covers the cost of the new development's share of the wastewater system's capacity
- Meters larger than 3 inches are rare (not including fire flow meters)

Meter	FY22	FY23	% Diff
5/8 in	\$ 2,055	\$ 2,285	11.2%
3/4 in	\$ 4,210	\$ 4,210	0.0%
1 in	\$ 7,410	\$ 7,410	0.0%
1.5 in	\$ 16,645	\$ 17,590	5.7%
2 in	\$ 31,465	\$ 34,415	9.4%
3 in	\$ 80,405	\$ 88,570	10.2%
4 in	\$ 156,530	\$ 173,245	10.7%
6 in	\$ 400,625	\$ 445,910	11.3%
8 in	\$ 780,840	\$ 872,130	11.7%
10 in	\$ 1,310,665	\$ 1,467,435	12.0%
12 in	\$ 2,001,460	\$ 2,244,900	12.2%
14 in	\$ 2,863,155	\$ 3,215,910	12.3%
16 in	\$ 3,904,635	\$ 4,390,660	12.4%

$$\frac{\text{Net Replacement Value}}{\text{HRSD's Plant Capacity}} \times \frac{\text{Meter Size}}{\text{Average Flow}}$$

- *February 22 – Budget Preview*
- *March 1 – 1st CIP meeting*
- *March 22 – Budget Work Session*
- *April 14 – Finance Committee meeting*
- **April 26 – Draft Budget**
- **May 24 – Formal Budget Adoption**
- **Newspaper advertisement - 4 consecutive weeks**
- **July 1 – Budget Effective**

Questions?
